



Five-Year Review Report
Second Five-Year Review Report
for
Springfield Township Dump Superfund Site

Springfield Township
Oakland County, Michigan

September 2004

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List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
BGS	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	United States Environmental Protection Agency
CFR	Code of Federal Regulations
COC	Contaminants of Concern
ESD	Explanation of Significant Difference
ISVE/AS	In-situ Vapor Extraction/Air Sparge
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDEQ	Michigan Department of Environmental Quality
MDNR	Michigan Department of Natural Resources
NCP	National Contingency Plan
NPL	National Priorities List
OCHD	Oakland County Health Department
O&M	Operation and Maintenance
PAH	Polyaromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PEAS	Pollution Emergency Alerting System
PPB	Parts per Billion
PRP	Potentially Responsible Party
RA	Remedial Action

RAO	Remedial Action Objective
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SSAC	Springfield Site Action Committee
STSSC	Springfield Township Site Steering Committee
SVE	Soil Vapor Extraction
SVOC	Semivolatile Organic Compound
VOC	Volatile Organic Compound

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Executive Summary

The Springfield Township "Dump" Site (the Site) is located at 12955 Woodland Trail, 3 miles south of Davisburg, Michigan (Springfield Township, Oakland County). The Site is on a rural, 12-acre residential lot surrounded by dense woods. During the 1960's, approximately 4 acres of the property were contaminated by unauthorized dumping. Liquid waste was disposed of in low areas of the Site along with about 1,500 55-gallon drums.

The State of Michigan performed a partial cleanup in 1979, removing the 1,500 drums and about 711 tons of polychlorinated biphenyl (PCB)-laden soil for disposal off-Site. Following completion of the state action, Michigan referred the Site to the United States Environmental Protection Agency (EPA). EPA inspected the Springfield Site in 1982, and placed it on the National Priorities List (NPL) in September 1983. EPA issued a Record of Decision (ROD) in December 1990 and a ROD Amendment in 1998. The selected remedy, as amended, established cleanup standards for groundwater based on Safe Drinking Water Act Maximum Contaminant Levels (MCLs) and Part 201 of Michigan Environmental Response Act standards for groundwater protection.

The remedy for the Site includes the excavation and onsite treatment of PCB-laden surface soils and other debris, the placement of a soil cover over the excavated area, the installation and operation of a soil vapor extraction (SVE) system to remove volatile organic compounds (VOCs) from the subsurface soils, the installation and operation of a groundwater extraction and treatment system to capture and clean-up the groundwater contaminant plume, and institutional controls intended to limit potential for future exposure to contaminants.

The remedy is protective of human health and the environment in the short term. There are no current exposure pathways. The soil cover, soil vapor extraction/air sparging system, groundwater extraction and treatment system, and institutional controls are functioning as designed, and have achieved the remedial objectives, which include minimizing the migration of contaminants to groundwater and surface water and preventing direct contact with contaminants at the Site.

Long-term protectiveness of the remedy is dependent upon the effectiveness of the groundwater extraction and treatment, soil vapor extraction/air sparging, and in-situ chemical oxidation systems in removing contaminants from the Site. The long-term effectiveness of the remedy will be demonstrated through continued monitoring of the groundwater, and analysis of the of the pump-and treat system capture zone. The overall effectiveness of the remedy can be determined once the environmental cleanup standards for groundwater are attained.

Five-Year Review Summary Form

Site IDENTIFICATION		
Site name (from WasteLAN): Springfield Township Dump		
EPA ID (from WasteLAN): MID980499966		
Region: 05	State: MI	City/County: Oakland County
Site STATUS		
NPL status: <input checked="" type="checkbox"/> Final <input type="checkbox"/> Deleted <input type="checkbox"/> Other (specify) _____		
Remediation status (choose all that apply): <input type="checkbox"/> Under Construction <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Complete		
Multiple OUs? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Construction completion date: 08 / 25 / 2000	
Has Site been put into reuse? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
REVIEW STATUS		
Lead agency: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> State <input type="checkbox"/> Tribe <input type="checkbox"/> Other Federal Agency _____		
Author name: William J. Ryan		
Author title: Remedial Project Manager	Author affiliation: U.S. EPA, Region 5	
Review period:** 10 / 30 / 2003 to 09 / 30 / 2004		
Date(s) of Site inspection: 10 / 29 / 2003		
Type of review: <div style="text-align: right; margin-top: 10px;"> <input checked="" type="checkbox"/> Post-SARA <input type="checkbox"/> Pre-SARA <input type="checkbox"/> NPL-Removal only <input type="checkbox"/> Non-NPL Remedial Action Site <input type="checkbox"/> NPL State/Tribe-lead <input type="checkbox"/> Regional Discretion </div>		
Review number: <input type="checkbox"/> 1 (first) <input checked="" type="checkbox"/> 2 (second) <input type="checkbox"/> 3 (third) <input type="checkbox"/> Other (specify) _____		
Triggering action: <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Actual RA OnSite Construction at OU # _____ <input type="checkbox"/> Construction Completion <input type="checkbox"/> Other (specify) _____ </div> <div> <input type="checkbox"/> Actual RA Start at OU# _____ <input checked="" type="checkbox"/> Previous Five-Year Review Report </div> </div>		
Triggering action date (from WasteLAN): 07 / 02 / 1999		
Due date (five years after triggering action date): 07 / 02 / 2004		

* ["OU" refers to operable unit.]

** [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

Five-Year Review Summary, continued

Issues:

1. Approval for and implementation of the In-situ chemical oxidation proposal
2. Extraction well fouling and pumping rate
3. Inadequate Site characterization
4. The potential need for additional monitoring wells
5. The need for contaminant capture analysis
6. Concentrations of TCE above cleanup standards at monitoring well MW4SR
7. The need for verification sampling

Recommendations and Follow-up Actions:

1. A proposal for in-situ chemical oxidation is currently under study by EPA and Michigan Department of Environmental Quality (MDEQ). Once the final concerns have been resolved, the contractor for the Potentially Responsible Party (PRP) will initiate the process. EPA anticipates this will begin before the end of calendar year 2004.
2. The potential fouling of the extraction well due to dewatering needs investigation. If problems are found they should be resolved by the PRPs. After the current well fouling/pumping rate issues are addressed, a periodic analysis of the well's specific capacity can be used to determine when fouling begins to reduce the extraction well's effectiveness.
3. Site characterization needs improvement. To address this, the contractor for the PRPs is conducting a new survey of the well elevations. This should provide a better representation of the water table. EPA also recommends that investigators obtain soil and groundwater samples when any new subsurface monitoring/remediation equipment is installed.
4. Construction details for existing monitoring wells need review. Once this is complete, the potential need for additional monitoring wells will be addressed.
5. Once the new well survey is complete and the characterization of the water table is adequately addressed, the issue of contaminant capture should be analyzed.

6. The concentrations of TCE in MW4SR have increased to current levels since the groundwater treatment and injection system began operating, which may indicate that the water table mounding caused by injection is mobilizing TCE in the vadose zone. EPA recommends this be investigated during the installation of monitoring points for the in-situ chemical oxidation process.
7. Verification sampling of potential hot spots should also be conducted during the installation of injection and monitoring wells for in-situ chemical oxidation.

Protectiveness Statement:

The remedy is protective of human health and the environment in the short term. There are no current exposure pathways. The soil cover, soil vapor extraction/air sparging system, groundwater extraction and treatment system, and institutional controls are functioning as designed, and have achieved the remedial objectives, which include minimizing the migration of contaminants to groundwater and surface water and preventing direct contact with contaminants at the Site.

Long-term Protectiveness:

Long-term protectiveness of the remedy is dependent upon the effectiveness of the groundwater extraction and treatment, soil vapor extraction/air sparging, and in-situ chemical oxidation systems in removing contaminants from the Site. This will be verified by continued monitoring of the groundwater, and analyzing the extent of the well-field capture zone. The groundwater pump and treat portion of the remedy is expected to be protective of human health and the environment once groundwater cleanup standards are attained.

Other Comments:

None

Five-Year Review Report

I. Introduction

The purpose of this five-year review is to determine whether the remedy at the Springfield Township Dump Site (the Site) is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and recommendations to address them.

The Agency is preparing this five-year review pursuant to CERCLA §121 and the National Contingency Plan (NCP). CERCLA §121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the Site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such Site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The agency interpreted this requirement further in the National Contingency Plan (NCP); 40 CFR §300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

The United States Environmental Protection Agency (EPA) Region 5 has conducted this five-year review of the remedial actions implemented at the Springfield Township Dump Site in Oakland County, Michigan. This review was conducted from October 2003 through September 2004. This report documents the results of the review. EPA was assisted in the review of the Springfield Site by the Michigan Department of Environmental Quality.

This is the second five-year review for the Springfield Township Dump Site. The triggering action for this review is the date of the first five year review, as shown in EPA's WasteLAN database: 07/02/99. This five-year review is required by the fact hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure. This document will become part of the Springfield Site file and it will be placed into the Site information repository located at the Springfield Township Hall, 650 Broadway, Davisburg, MI.

II. Site Chronology

Table 1: Chronology of Site Events

Event	Date
Initial discovery of problem or contamination	Mid 1970's
The State of Michigan performs a partial cleanup	1979-1980
Proposed to NPL	12/30/1982
NPL listing	09/08/1983
Remedial Investigation/Feasibility Study	02/1985 - 07/1990
ROD signature	09/29/1990
Remedial Design	03/15/1991 - 12/11/1992
AOC for Remedial Design	03/20/1992
Remedial Design Complete/Remedial Action Start	12/11/1992
ESD	11/10/1993
UAO Remedial Action for Groundwater	11/10/1993
Consent Decree for Soil and Groundwater Remedial Action	03/31/98
ROD Amendment	06/10/1998
First five-year review	07/02/99
Final Site Inspection	08/22/2000
Construction Completion (PCOR)	08/25/2000
ISVE system shut-down	11/2001
Current Five-Year Review Site Inspection	10/29/2003
Next Five-Year Review	09/30/2009

III. Background

Physical Characteristics The Site is located on a densely wooded, 12-acre rural residential lot near Davisburg, Michigan. Davisburg and Springfield Township are located in Oakland County. Approximately 4 acres of the Site were used for unauthorized chemical waste disposal during the 1960's. There are about 25 homes within one mile of the Site, with the nearest residence located approximately 800 feet away. All homes in the area are served by private wells. A Site map is provided as Attachment 1.

The Site lies on a northeast-southwest trending pitted outwash plain. Surface water bodies include Big Lake to the northeast, and White Lake and Duck Lake to the southwest. Wetlands to the west, southeast, and southwest of the Site are situated in kettles and characterized by large changes in elevation. Water levels in these wetlands are several feet higher than the local water table and appear to have little influence in the groundwater flow regime.

The unconsolidated deposits consist of well-sorted fine to coarse-grained sand with some silt-sized particles. These soils extend to a maximum depth of 140 to 150 ft. Underlying the sandy outwash deposits is a layer of interbedded sands and clay, which extend from 150 to 175 ft. From a seismic survey, bedrock is estimated to be about 350 ft below ground surface (BGS).

Land and Resource Use The Site is a rural, residential area with about 25 homes within one mile of the Site. Groundwater underlying the Site is present in an unconfined aquifer. Due to the varied topography, the depth to the local water table varies from about 70 to 110 ft BGS. Groundwater generally flows northeast towards Big Lake. Residences surrounding the Site rely on groundwater for their drinking water, but none have tested positive for contaminants related to the Site.

History of Contamination The Site was used for industrial waste disposal between 1966 and 1968 but disposal may have included other years. An unknown amount of industrial waste was drained into excavated pits or low areas of the ground surface on approximately 4 acres of the property. In addition, approximately 1,500 barrels were found on the Site.

The dumping of wastes was done by waste haulers under contract or other agreements with the waste generators. The first official notification of illegal dumping was made by the supervisor of Rose Township in a letter to the Oakland County Health Department (OCHD) in June 1968.

Initial Response In July 1971, the OCHD issued a certified letter to the property owner, Mr. Joseph Nickson, stating that corrective action was required. In April 1979, a Pollution Emergency Alerting System (PEAS) complaint was filed by the OCHD to the MDNR. As a result of this complaint, the MDNR conducted limited drum sampling at the Site on June 4, 1979. Subsequent analyses by the MDNR identified the drum's contents as paint sludges, solvents, PCBs, oils and greases.

From August 1979 through June 1980, sampling of well water at private residences near the Site was conducted. During initial sampling episodes, several residential wells in the vicinity of the Site were reported to be contaminated with low levels of tetrachloroethene and trichloroethene (VOCs that were similar to those found at the Site).

In September 1979, the Site was declared an environmental emergency by the State of Michigan Toxic Substances Control Commission (TSCC) based on potential threats to human health and the environment. During the same month, the MDNR commenced with the excavation and removal of drums from the Site. In December, a special appropriation was made by the State legislature for the cleanup of the wastes and investigation of the impact on ground water. By July 1980, 1,500 55-gallon drums had been removed.

From 1979 to 1980, 711 tons of contaminated soil was removed to a licensed hazardous waste facility in Alabama. This included much of the material contained in the disposal pit located in the central portion of the Site. Because available funding was insufficient, some wastes were left on-Site. This removal action left the disposal pit area several feet below the original grade. Backfill, composed primarily of sand, was brought in and the disposal pit was re-graded.

In 1980, MDNR initiated a hydrogeological investigation at the Site and subsequently discovered a plume of groundwater contamination beneath the property. MDNR also constructed a fence around the contaminant disposal area and left the remaining soil (and groundwater) contamination to be addressed by the United States Environmental Protection Agency (EPA) under its federal Superfund authority.

EPA inspected the Site in 1982. After submitting the Site Inspection report, EPA placed the Site on the National Priorities List (NPL) in September 1983.

From 1985 to 1989, MDNR initiated and completed a Remedial Investigation (RI) to determine the nature and extent of soil and groundwater contamination. The RI included a risk assessment to determine the potential human health risks posed by the Site. In July 1990, a Feasibility Study (FS) Report was completed and a Proposed Plan for Site cleanup was released to the public for comment.

Basis for Taking Action Hazardous substances that have been released at the Site in each media include:

Table 2: Contaminants of Concern (COCs)

<u>Soil</u> (Surface and Subsurface)	<u>Groundwater</u>
PCBs	Arsenic
Arsenic	Lead
Barium	Toluene
Lead	Trichloroethylene (TCE)
Dieldrin	1,1-Dichloroethylene (1,1-DCE)
Toluene	1,1-Dichloroethane (1,1-DCA)
Chlorobenzene	1,1,1-Trichloroethane (1,1,1-TCA)
Trichloroethylene	Trichloroethylene

Exposure to soil and groundwater containing hazardous substances is associated with significant human health risks due to the exceedance of EPA's risk management criteria for the reasonable maximum exposure scenarios. Although no one was currently drinking contaminated water, a potential health threat was posed by the groundwater contaminant plume. The human health risks were highest for ingestion of contaminants in groundwater from potential water supply wells. Soil contaminants posed a risk to human health through dermal contact and ingestion. Other potential health threats include inhalation of contaminated dust or vapor.

IV. Remedial Actions

Remedy Selection A ROD was signed on September 29, 1990. The Remedial Action Objectives (RAOs) were developed as a result of data collected during the RI and addressed groundwater, subsurface soil, and surface soil contamination at the Site and included the elimination of the sources of contamination from the Site and remediation of contaminated groundwater. These include:

1. Excavation and on-site incineration of contaminated soils;
2. Installation and operation of an in-situ vapor extraction (ISVE) system to remove VOCs from Site soils;
3. Installation and operation of a groundwater extraction and treatment system;
4. Extension and maintenance of an existing fence surrounding the Site.

The 1990 selected remedy has the following specific components:

1. Excavation and thermal destruction of soils to remove to specific cleanup levels for PCBs,

VOCs, Semi-VOCs, and pesticides in the source area;

2. Solidification of incinerator ash according to ARARs;
3. Solidification of soils contaminated only with metals;
4. Redeposition of ash and treated soil on-Site (the ash will either be stabilized to make it inert prior to its on-Site disposal or will be placed in a properly designed solid waste unit on-Site);
5. Re-contouring of the excavated areas and control of the ash or dust emissions;
6. Installation of an in-situ vacuum extraction system to remove VOCs and SVOCs from remaining unsaturated contaminated soils at depth; and
7. Installation and operation of a ground water extraction and treatment system which utilizes a carbon adsorption unit to treat the groundwater before re-injection into the aquifer.

EPA issued an Explanation of Significant Differences (ESD) on November 10, 1993 for the groundwater component of the 1990 ROD. The ESD established the numeric values for the background concentrations of lead and arsenic in groundwater. These values were not specifically identified in the 1990 ROD.

A ROD Amendment was signed on June 10, 1998. The ROD Amendment includes modifications to the estimated volume of soil to be treated on-site, revisions to certain soil and groundwater cleanup standards, a modification of the method of on-site treatment of certain contaminated soils, and the placement of deed restrictions on the future use of a portion of the Site. This Amendment was based on additional studies and evaluations which are documented in the "Remedial Design Field Investigation (RDFI) Report" (1991), a Predesign Report which re-evaluated the original ROD remedy, and the "Removal of PCBs from Contaminated Soil Using the CF System Solvent Extraction Process: A Treatability Study" (May 1995). All three documents were placed in the administrative record. Additionally, discussions between EPA, citizens of Springfield Township, elected officials of Springfield Township (who formed the Springfield Site Action Committee (SSAC)) and the potentially responsible party group (the Springfield Township Site Steering Committee (STSSC)) had led to modifications of the remedy to accommodate community preferences. EPA released a proposed plan for public comment on March 26, 1998. The comment period ran from March 26, 1998 through April 27, 1998.

The 1998 selected remedy has the following specific components:

1. All soils which contain semi-volatile organic contaminants (such as PCBs) in excess of the Remedial Action Standards (RAS) shown below would be excavated to a depth of 6 feet.
2. All soils which contain over 50 ppm of PCBs would be excavated regardless of depth.
3. Excavated soils which are contaminated with semi-volatile organics would be treated using

either the soil washing, low temperature thermal desorption, or solvent extraction treatment methods (described below). Treated soil containing residual levels of up to 5 ppm of PCBs and 620 ppb of dieldrin (a pesticide) may be backfilled into the excavated area.

4. Treated soil that exceeds the RAS for metals would be solidified and backfilled on-site or disposed of off-site at a permitted facility.
5. All areas of excavation would be returned to grade, covered with a 1-foot thick, clean soil cover (cap), and re-vegetated.
6. All soils on the portion of the Site which is on the "Nickson property" and outside of the area of semi-volatile organic contamination, and which exceed the RAS for metals to a depth of 1.5 feet, would be excavated and either treated (solidification) and backfilled on-site or disposed of at a permitted facility.
7. The future use of the south 500 feet of the "Nickson property" would be restricted to prevent activities which would disturb the soil cap or the backfilled soils.
8. All contaminated soil outside of the "Nickson property" (the former "Tinsley property") would be excavated to depth to meet the RAS, and either solidified and backfilled on the "Nickson property" or disposed of at a permitted facility. Soil treatment residuals would not be placed on the "Tinsley property."
9. Soils containing VOCs would still be treated using the soil vapor extraction cleanup remedy previously selected in the 1990 ROD; however, certain cleanup levels would be adjusted to current state standards;
10. Groundwater would continue to be extracted and treated as under the 1990 ROD and as designed and currently operated by the STSSC; however, certain cleanup levels would be adjusted to current State standards.

Final cleanup goals for the Site are as follows:

Table 3: Remedial Action Standards

Remedial Action Standards for Semi-Volatile Organics in Soil

<u>Contaminant</u>	<u>RAS</u>
PCBs	1 ppm ^(a)
Dieldrin	620 ppb ^(c)

Table 3: Remedial Action Standards (continued)

Remedial Action Standards for Metals in Soil

<u>Contaminant</u>	<u>RAS</u>
Arsenic	9 ppm ^(b)
Barium	30,000 ppm ^(c)
Lead	400 ppm ^(c)

Remedial Action Standards for Volatile Organics in Soil

<u>Contaminant</u>	<u>RAS</u>
Toluene	16 ppm ^(d)
Chlorobenzene	2 ppm ^(d)
Trichloroethylene	0.10 ppm ^(d)

Remedial Action Standards for Groundwater

<u>Contaminant</u>	<u>RAS</u>
Toluene	1 ppm ^(e)
Trichloroethylene (TCE)	5 ppb ^(e)
1,1-Dichloroethylene (1,1-DCE)	7 ppb
1,1-Dichloroethane (1,1-DCA)	880 ppb
1,1,1-Trichloroethane (1,1,1-TCA)	200 ppb
Lead	50 ppb (Background)
Arsenic	20 ppb (Background)

Notes:

ppm = parts per million.

ppb = parts per billion.

(a) 1 ppm first 6 feet and 50 ppm below 6 feet.

(b) Background level for arsenic established in ROD Amendment.

(c) ROD Amendment dermal contact standard, MERA Operational Memo #8, Rev. 4, June 1995.

(d) ROD Amendment groundwater protection standard, MERA Op. Memo #8, Rev. 4, June 1995.

(e) ROD Amendment groundwater standard, MERA Operational Memo #8, Rev. 4, June 1995.

The selected remedy eliminates the principal threat posed by the Site by reducing the toxicity and mobility of the contaminated materials, thereby reducing the potential exposure to VOCs, Semi-VOCs and metals.

Remedy Implementation EPA initiated the remedial design (RD) for the groundwater and SVE systems in 1992. On March 20, 1992, EPA and the PRPs entered into an Administrative Order on Consent (AOC) to complete the RD for the groundwater and ISVE systems, calculate background levels on groundwater for lead and arsenic, and pilot test the ISVE system. On November 12, 1992, EPA and the PRPs entered into another AOC requiring the PRPs to pay \$1,157,373.04 in past costs incurred by EPA and the U.S. Department of Justice.

The RD was finalized on December 11, 1992. On November 10, 1993, EPA issued a Unilateral Administrative Order (UAO) to the PRPs to construct and operate the groundwater treatment system approved by EPA under the 1992 AOC for RD. The PRPs completed construction of the groundwater extraction and treatment system in 1994. A pre-final inspection was conducted by the EPA in June 1994. At that time, EPA determined that the groundwater extraction and treatment system was operating as intended. The PRPs operated the system until 1998.

In March 1998, the PRPs entered into a Consent Decree (CD) with EPA to implement all remedial actions presented in the 1998 ROD Amendment. The 1993 UAO was terminated by EPA upon entry of the CD.

During the Summer of 1999, the PCB contaminated soils were excavated and treated using a soil washing system located onsite. Most of the treated soil batches achieved treatment standards and were replaced. Batches that did not achieve the treatment standards and were either re-treated or disposed of in a licensed, off-site facility. A soil cover was then placed over the treated area and grass was planted.

In May 2000, ISVE equipment was installed, along with an air sparging system to speed the restoration of the groundwater at the Site. EPA conducted a final inspection of the SVE and air sparging systems on August 22, 2000, and determined that the systems were operating as designed. EPA originally estimated that the ISVE equipment would operate for 2-5 years before soil treatment standards were reached, however the ISVE system has not operated since November 2001 (see discussion in Section V). The groundwater treatment system and the newly installed air sparging system will likely run another 2-5 years after ISVE shut-off before the groundwater cleanup standards are reached.

Below is a summary of remedial actions:

1. A total of 12,000 cubic yards of semi-volatile organic contaminated soils (such as PCBs) in excess of the Remedial Action Standards (RAS) were excavated and treated and/or disposed.
2. Excavated soils contaminated with semi-volatile organics have been treated using either soil washing, low temperature thermal desorption, or solvent extraction treatment methods. Treated soil containing residual levels of up to 5 ppm of PCBs and 620 ppb of dieldrin (a pesticide) were backfilled in the excavated area.

3. Treated soil that exceeded the RAS for metals have been solidified and backfilled onsite or disposed of off-site at a permitted facility.
4. All areas of excavation have been returned to grade, covered with a 1-foot thick layer of clean soil, and re-vegetated.
5. All soils on the portion of the Site that is on the Nickson property and outside of the area of semi-volatile organic contamination, and which exceeded the RAS for metals to a depth of 1.5 feet, have been excavated and either treated (solidified) and backfilled onsite or disposed of at a permitted facility.
6. The future use of the south 500 feet of the Nickson property has been restricted to prevent activities that would disturb the soil cap or the backfilled soils.
7. Soils containing VOCs are being treated using the soil vapor extraction system.
8. Groundwater is being treated using a pump-and-treat system designed to pump a 5 to 10 gallons per minute. Extracted groundwater is subjected to carbon adsorption to remove VOCs prior to re-injection.

EPA has determined that all RA construction activities were performed according to specifications. The entire Site achieved construction completion status when the PCOR was signed on August 25, 2000. It is expected that cleanup levels for all groundwater contaminants will have been reached within 10 years of this five-year review. After groundwater cleanup levels have been met, EPA will issue a Final Close Out Report.

System Operation and Maintenance System Operation and Maintenance (O&M) is performed by the PRPs in compliance with the CD and Scope of Work. The primary components of the remedy addressed by O&M are the groundwater treatment system and the in-situ vapor extraction air sparging system. The PRP's contractor (currently GZA GeoEnvironmental, Inc.) conducts routine weekly inspections of the Springfield facilities, and submits quarterly progress reports to EPA and MDEQ. In addition to the quarterly progress reports, GZA also prepares semi-annual groundwater monitoring reports.

V. Progress Since the Last Review

Protectiveness statements from the last review: "With the pending implementation of the final remedial action components and the continuing operation of the groundwater extraction and treatment system pursuant to the ROD, as amended, as designed, the remedy selected for the Springfield Site remains protective of human health and the environment".

Status of recommendations and follow-up actions from last review: "The construction of the groundwater extraction and treatment system was completed in 1994 and operation and

maintenance of this system is ongoing. EPA recommends that the groundwater treatment system continue to be operated at the Springfield Site as designed until final groundwater cleanup standards, as set forth in the ROD, as amended, are achieved. Further, the revised PCB-laden soil and SVE remedial actions will be implemented beginning in August 1999 through September 2000. The SVE system will likely be operated for a period of 2-5 years until the cleanup standards are met. EPA recommends that these remedial components be constructed and operated as designed”.

Groundwater Treatment System The first five-year review recommended continued operation of the groundwater pump and treat system and continued groundwater monitoring. During the past five years, the groundwater pump and treat system has operated on a relatively consistent basis with intermittent shutdowns for replacement of bag filters, recovery well development and pump replacement, failing float switches and other low-flow alarms, and to remedy iron fouling problems. On average, the influent flow rate has been approximately 2 to 10 gallons per minute. Groundwater monitoring has been consistent over the last five years.

ISVE/AS System The ISVE/AS system was started in August 2000. The ISVE part of the system ran for a year, and sample results record a steady decline in VOC concentrations. The ISVE has not operated since November 2001, because the influent concentrations were tailing off, and a rebound check showed no increase in VOCs. Soil samples also confirmed that VOC concentrations were below RASs. The ISVE system remains functional, and EPA will require additional rebound tests before the site is considered for close-out. The AS system is operated in the parts of the year when the ambient temperatures remain above freezing.

VI. Five-Year Review Process

Administrative Components For the current report the Remedial Project Manager (RPM) established a review schedule. Its components included:

- Community Notification
- Document Review
- Data Review
- Site Inspections
- Five-Year Review Report Development and Review

Community Notification Activities to involve the community in the five-year review process were initiated in July 2004 with a call to the Community Involvement Coordinator (CIC) for the Springfield site. A notice was published in the local newspaper (Tri County Times) on August 29, 2004. Since the notice was issued, no member of the community has voiced any interest or opinion concerning the five-year review process.

Document Review This five-year review consisted of a review of relevant documents including O&M records, evaluation reports and groundwater sampling data (See Attachment 2).

Applicable groundwater cleanup standards, as listed in the 1990 ROD, were reviewed (See Attachments 4-5).

Data Review The RPM has reviewed the data submitted in the semi-annual Groundwater Monitoring Reports from 2003-2004. A table compiling the groundwater sampling results from the semi-annual monitoring events from July 1994 to May 2004 can be found in Attachment 3. A review of the groundwater sampling data shows that of the wells regularly sampled, only two consistently exceed the RAS for TCE (5ppb). These wells, MW-4SR and MW-105 are located within the fenced area of the Site. MW-105 is screened in a true "hot spot" and the locations for the pumping and injection wells were chosen to hydraulically force treated groundwater through the area of high contamination and move it toward the pumping well, where it can be removed and treated. The TCE concentrations in MW-105 range from 51 to 1600 ppb. The TCE that occurs in MW-4SR is more problematic, and may be related to the liberation of TCE held in the vadose zone, which is periodically saturated by the injection of treated water at the injection well. The TCE concentrations in MW-4SR range from 2 to 100 ppb. EPA is recommending that this be investigated during the implementation of the ISCO proposal.

Site Inspections The RPM inspected the Site on 10/29/2003. He was accompanied by the Site Project Manager and Site Geologist from MDEQ, the Remediation Specialist from Daimler Chrysler (the PRP), and the PRP's Project Manager in charge of the Site. The group reviewed the Site history and examined the groundwater pump-and-treat and ISVE/air sparging systems, confirming that the installations were functioning as designed and that the cover and fencing were intact.

Interviews Interviews with individuals beyond the five-year review project team were not conducted. Since the newspaper notice, no member of the community or any other individual voiced any interest in conducting an interview related to the five-year review.

VII Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, applicable or relevant and appropriate requirements (ARARs), risk assumptions, and the results of the site inspection indicate that the remedy is functioning as intended by the 1998 ROD Amendment. The excavation and treatment of soils and the implementation of institutional controls have achieved the remedial objectives to minimize the migration of contaminants to groundwater and prevent direct contact with, or ingestion of, contaminants in soils.

The ongoing component of the cleanup is groundwater contaminant containment and restoration by the pump-and-treat system. Operation and maintenance of the groundwater pump and treat system has, on the whole, been effective. EPA is currently in the process of evaluating opportunities for system optimization (see issues and recommended follow-up actions).

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the physical conditions of the Site that would affect the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No other events have affected the protectiveness of the remedy and there is no other information that calls into question the short term protectiveness of the remedy. However, as stated above, long term protectiveness is being evaluated.

There is some concern that the contaminant plume may not be fully contained by the extraction system. These concerns will be investigated once the Site capture zone analysis and groundwater contamination study are complete.

Technical Assessment Summary

According to the data reviewed and the Site inspections, the remedy is functioning as intended by the ROD and ROD Amendment. There have been no changes in the physical conditions of the Site that would affect the protectiveness of the remedy. ARARs for soil and sediment contamination cited in the ROD and ROD Amendment have been met. There have been no changes in the toxicity factors for the contaminants of concern that were used in the baseline risk assessment, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. On-going investigations and treatment enhancements, when completed, are anticipated to provide further insight into effectiveness of the pump-and-treat system and yield data that will allow an analysis of the capture zone. There is no other information available that calls into question the protectiveness of the remedy.

VIII. Issues

Table 4: Issues

Issues	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Approval for and implementation of the In-situ chemical oxidation proposal	N	Y
Extraction well fouling and pumping rate	N	Y

Issues (continued)	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Inadequate Site characterization	N	Y
The potential need for additional monitoring wells	N	Y
The need for contaminant capture zone analysis	N	Y
Concentrations of TCE above cleanup standards at monitoring well MW4SR	N	Y
The need for verification sampling	N	Y

IX. Recommendations and Follow-up Actions

Table 5: Recommendations and Follow-up Actions

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
In-situ Chemical Oxidation	The proposal is under review and will be implemented after approval.	PRPs	EPA/MDEQ	December 2004	N	Y
Well fouling and pumping rate	After the current well fouling/pumping rate issues are addressed, a periodic analysis of the well's specific capacity can be used to determine when fouling begins to reduce the extraction well's effectiveness.	PRPs	EPA/MDEQ	December 2004	Y	Y

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
Site characterization	A new well survey is needed. EPA also recommends that investigators obtain soil and groundwater samples when any new subsurface monitoring or remediation equipment is installed.	PRPs	EPA/MDEQ	December 2004	N	Y
Additional monitoring wells	Construction details for existing monitoring wells need review. Once this is complete, the potential need for additional monitoring wells can be addressed.	PRPs	EPA/MDEQ	December 2004	N	Y
Capture zone analysis	Once the new well survey is complete and the characterization of the water table is adequately addressed, the issue of contaminant capture should be analyzed.	PRPs	EPA/MDEQ	September 2005	N	Y
TCE above cleanup standards	EPA recommends this be investigated during the installation of monitoring points for the in-situ chemical oxidation process.	PRPs	EPA/MDEQ	December 2004	N	Y

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
Verification sampling	Verification sampling of potential hot spots should also be conducted during the installation of injection and monitoring wells for in-situ chemical oxidation.	PRPs	EPA/MDEQ	December 2004	N	Y

X. Protectiveness Statements

Short-term Protectiveness The remedy is protective of human health and the environment in the short term. There are no current exposure pathways. The soil cover, soil vapor extraction/air sparging system, groundwater extraction and treatment system, and institutional controls are functioning as designed, and have achieved the remedial objectives, which include minimizing the migration of contaminants to groundwater and surface water and preventing direct contact with contaminants at the Site.

Long-term Protectiveness Long-term protectiveness of the remedy is dependent upon the effectiveness of the groundwater extraction and treatment system, soil vapor extraction/air sparging system, and, potentially, an in-situ chemical oxidation system in removing contaminants from groundwater at the Site. This will be verified by continued monitoring and analyzing the extent of the groundwater extraction and treatment system capture zone. The groundwater pump and treat portion of the remedy is expected to be protective of human health and the environment once cleanup standards for groundwater are attained.

XI. Next Review

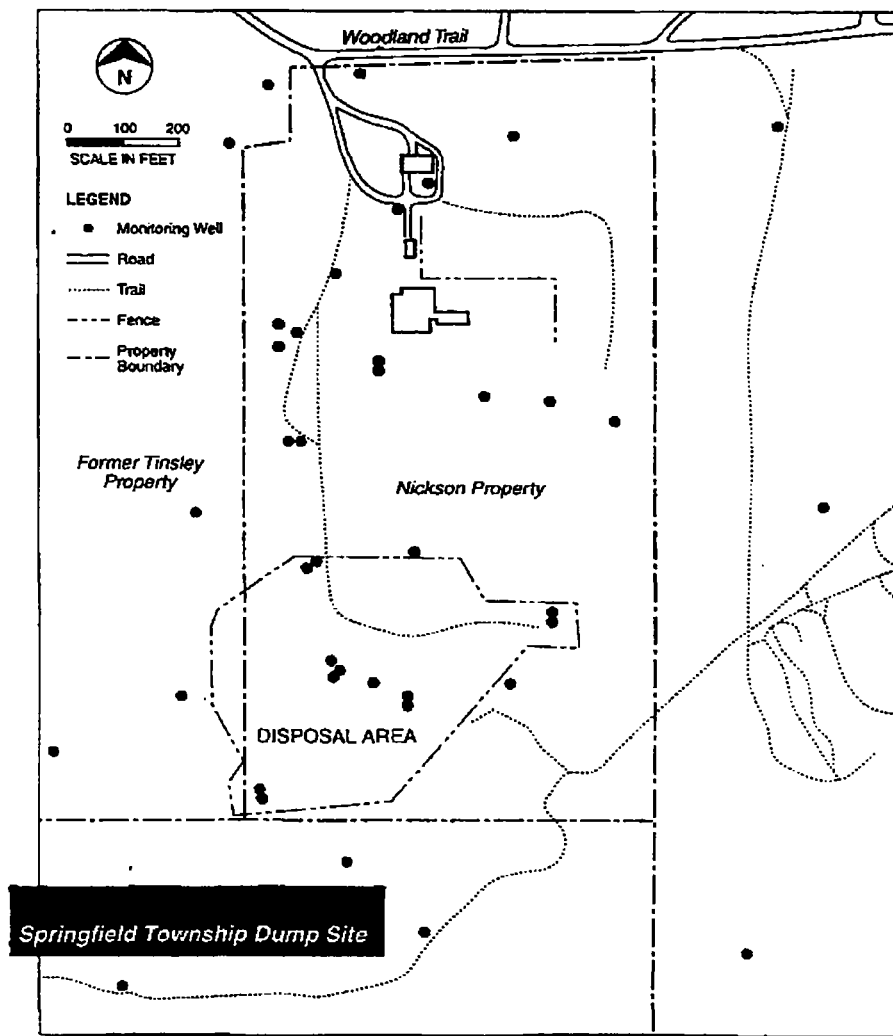
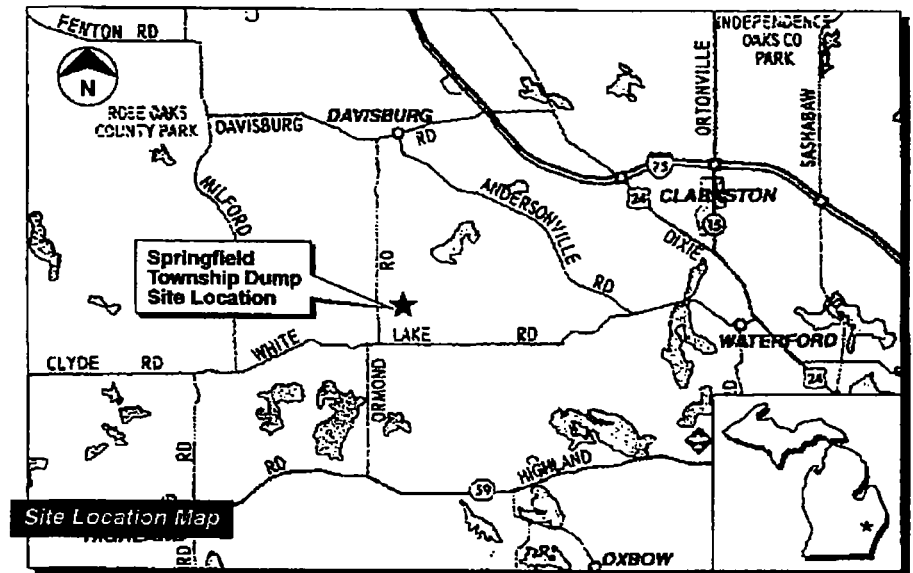
The next five-year review for the Springfield Site will be conducted in 2009, and that report will be due by September 30, 2009.

Attachments

1. Site Map
2. List of Documents Reviewed
3. Summary of Groundwater Sampling Results
4. Federal Applicable or Relevant and Appropriate Requirements (ARARs)
5. State Applicable or Relevant and Appropriate Requirements (ARARs)

Attachment 1

Site Map



Attachment 2

List of Documents Reviewed

Springfield Township Dump Site Record of Decision, September 29, 1990

Springfield Township Dump Site Record of Decision Amendment, June 10, 1998

Springfield Township Dump Site first Five-Year Review, July 2, 1999

Springfield Township Dump Site Consent Decree, March 31, 1998

Springfield Township Dump Site Explanation of Significant Differences, November 10, 1992

Springfield Township Dump Site Preliminary Completion Report, August 25, 2000

Springfield Township Dump Site Proposed Plan, 1998

Springfield Township Dump Site Operation and Maintenance Plan, January 2001

Springfield Township Dump Site Progress Reports, 2003 - 2004

Springfield Township Dump Site Groundwater Monitoring Reports, 2003 - 2004

Attachment 3

Summary of Groundwater Sampling Results

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-IDR	7-Jul-94	A4346903	< 1	< 1	< 1	< 1	49 J	< 1	< 3	< 2
MW-IDR	5-Oct-94	940888-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	41	< 0.5 U	21.1	< 1 U
MW-IDR	12-Jan-95	950020-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	49	< 0.50 U	16.5 J	< 1 U
MW-IDR	16-Apr-95	950210-33	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	35	< 0.5 U	5.1 B	< 2 U
MW-IDR DUP	16-Apr-95	950210-34	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	36	< 0.5 U	6.1 B	< 2 U
MW-IDR	13-Jul-95	950488-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	29	< 0.5 U	16.6	
MW-IDR	11-Jan-96	960004-15	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	32	< 0.5 U	13.4	< 1 U
MW-IDR	10-Jul-96	960535-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	19	< 0.5 U	16.4	< 2 U
MW-IDR DUP	10-Jul-96	960535-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	22	< 0.5 U	16.5	< 2 U
MW-IDR	16-Jan-97	WW2648212	< 0.05	< 0.05	< 0.05	< 0.04	15	< 0.05	17	0.7 J
MW-IDR	12-Jul-97	WW2743054	< 0.5	< 0.5	< 0.5	< 0.5	17	< 0.5	13.2	< 2
MW-IDR	15-Jan-98	WW2859267	< 0.5	< 0.5	< 0.5	< 0.5	14	< 0.5	17.7	< 2
MW-IDR	11-Sep-98	85515-2	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	15	< 2
MW-IDR	17-Mar-99	E218847	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-IDR ¹	5-Oct-99	-	-	-	-	-	-	-	-	-
MW-IDR	14-Mar-00	E245048	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-IDR	10-Nov-00	265769	< 10	< 1	< 1	< 10	11	< 10	< 5	< 3
MW-IDR	25-May-01	279738	< 10	< 1	< 1	< 10	11	< 10	14	< 3
MW-IDR	15-Nov-01	293494	< 10	< 1	< 1	< 10	14	< 10	7.5	< 3
MW-IDR DUP	15-Nov-01	293492	< 10	< 1	< 1	< 10	14	< 10	8	< 3
MW-IDR	30-May-02	306699	< 10	1.3	< 1	< 10	12	< 10	16	< 3
MW-IDR	6-Nov-02	319782	< 10	< 1	< 1	< 10	< 10 ⁺	< 10	11	< 3
MW-IDR	15-May-03	331718	< 10	< 1	< 1	< 10	11	< 10	18	< 3
MW-IDR	6-Nov-03	348864	< 10	< 1	< 1	< 10	< 10	< 10	< 5	8.7
MW-IDR DUP	6-Nov-03	348878	< 10	< 1	< 1	< 10	< 10	< 10	< 5	13.0
MW-IDR	21-May-04	361828	< 10	< 1	< 1	< 10	< 10	< 10	< 5	3.7
MW-ISR	7-Jul-94	A4346902	< 1	1	< 1	12	8	< 1	< 3	2 J
MW-ISR	5-Oct-94	940888-02	< 0.5 U	0.8	< 0.5 U	3	5	< 0.5 U	< 2 U	216
MW-ISR	12-Jan-95	950020-04	< 0.5 U	< 0.5 U	< 0.5 U	1	< 0.5 U	< 0.5 U	< 2.0 JU	< 1 U
MW-ISR	15-Apr-95	950210-26	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.0 U	< 2 U
MW-ISR	13-Jul-95	950488-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	7	< 0.5 U	< 2.0 U	< 2 U
MW-ISR	9-Jan-96	960004-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	7	< 0.5 U	< 2 U	< 1 U
MW-ISR	10-Jul-96	960535-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	10	< 0.5 U	5.2 B	< 2 U
MW-ISR DUP	16-Jan-97	WW2648216	0.06 J	< 0.05	< 0.05	< 0.04	3.7	< 0.05	4.8 J	1.7 J
MW-ISR	16-Jan-97	WW2648219	< 0.05	< 0.05	< 0.05	< 0.04	3.9	< 0.05	< 1.7	1.4 J
MW-ISR	12-Jul-97	WW2743053	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	< 2	3.3
MW-ISR DUP	12-Jul-97	WW2743093	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	< 2	4.7
MW-ISR	15-Jan-98	WW2859266	< 0.5	< 0.5	< 0.5	< 0.5	14	< 0.5	< 2	< 2
MW-ISR DUP	15-Jan-98	WW2859303	< 0.5	< 0.5	< 0.5	< 0.5	14	< 0.5	< 2	< 2
MW-ISR	11-Sep-98	85515-1	< 0.5	< 0.5	< 0.5	< 0.5	12	< 0.5	< 2	2.5
MW-ISR DUP	11-Sep-98	85515-30	< 0.5	< 0.5	< 0.5	< 0.5	13	< 0.5	3.2	5.2
MW-ISR	17-Mar-99	E218845	< 10	< 1	< 1	< 10	11	< 10	< 5	< 3
MW-ISR ¹	5-Oct-99	-	-	-	-	-	-	-	-	-

TABLE J

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/l)							
			TOLUENE	CE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO- BENZENE	AS ¹	LEAD ¹
MW-1D	8-Jul-94	A4149201	< 1	1	< 1	< 1	< 1	< 1	< 3	15
MW-1D DUP	8-Jul-94	A4149201	0.1 U	1	< 1	< 1	< 1	< 1	< 3	28
MW-1D	5-Oct-94	940888-03	< 0.5 U	2	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	1.6 U
MW-1D	12-Jan-95	950020-07	< 0.5 U	1	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	10.7
MW-1D	15-Apr-95	950210-28	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	15.6
MW-3D DUP	15-Apr-95	950210-27	< 0.5 U	0.6	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	18.4
MW-1D	13-Jul-95	950488-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4.3
MW-1D	11-Jan-96	960004-14	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4.8
MW-1D DUP	11-Jan-96	960004-16	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	3.6
MW-1D	10-Jul-96	960515-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4.6 U	2.5
MW-1D	17-Jan-97	WW2648174	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	12.9
MW-1D DUP	17-Jan-97	WW2648178	0.08 U	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	15.0
MW-1D	12-Jul-97	WW2743096	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	2.3
MW-1D DUP	12-Jul-97	WW2743094	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	7.78
MW-1D	15-Jan-98	WW2859269	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	1.7
MW-1D DUP	15-Jan-98	WW2859304	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	2
MW-1D	11-Sep-98	85515-4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	4
MW-1D DUP	11-Sep-98	85515-31	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.9	7.5
MW-1D	18-Mar-99	E218849	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-1D	6-Oct-99	E234151	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-1D	14-Mar-00	E245046	< 10	< 1	< 1	< 10	< 10	< 10	< 5	21
MW-3D	8-Nov-02	320323	< 10	< 1	< 1	< 10	< 10	< 10	< 5	9.2
MW-3D DUP	8-Nov-02	320324	< 10	< 1	< 1	< 10	< 10	< 10	< 5	8.9
MW-3D	14-May-03	331555	< 10	< 1	< 1	< 10	< 10	< 10	< 5	7.1
MW-3D	18-May-04	361829	< 10	< 1	< 1	< 10	< 10	< 10	< 5	13.0

TABLE 3

**SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE**

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO- BENZENE	AS ³	LEAD ³
MW-3S	7-Jul-94	A4346905	< 1	< 1	< 1	8	8	< 1	< 3	36
MW-3S	5-Oct-94	940888-04	< 0.5 U	< 0.5 U	< 0.5 U	15	11	< 0.5 U	< 2 U	28.5
MW-3S	12-Jan-95	950012-21	< 0.5 U	< 0.5 U	< 0.5 U	18	10	< 0.5 U	< 2 U	45.7
MW-3S DUP	12-Jan-95	950012-20	< 0.5 U	< 0.5 U	< 0.5 U	14	8	< 0.5 U	< 2 U	65.4
MW-3S	15-Apr-95	950210-22	< 0.5 U	< 0.5 U	< 0.5 U	18	7	< 0.5 U	< 2 U	38.5
MW-3S	13-Jul-95	950488-01	< 0.5 U	< 0.5 U	< 0.5 U	15	7	< 0.5 U	< 2 U	18.6
MW-3S	11-Jan-96	960004-19	< 0.5 U	< 0.5 U	3	15	7	< 0.5 U	< 2 U	17.1
MW-3S	10-Jul-96	960535-01	< 0.5 U	< 0.5 U	< 0.5 U	26	5	< 0.5 U	2.8 B	31.5
MW-3S	16-Jan-97	WW2648217	< 0.05	0.1 J	0.05 J	17	4.9	< 0.05	< 1.7	4.2
MW-3S	12-Jul-97	WW2743055	< 0.5	< 0.5	< 0.5	13	4.2	< 0.5	< 2	36.3
MW-3S	15-Jan-98	WW2648217	< 0.5	< 0.5	< 0.5	16	4.9	< 0.5	< 2	14.2
MW-3S	11-Sep-98	85515-3	< 0.5	< 0.5	< 0.5	14	2.6	< 0.5	2.1	29
MW-3S	18-Mar-99	E218851	< 10	< 1	< 1	17	< 10	< 10	< 5	< 3
MW-3S	6-Oct-99	E234152	< 10	< 1	< 1	15	< 10	< 10	< 5	5.5
MW-3S	14-Mar-00	E245045	< 10	< 1 J	< 1	19	< 10	< 10	< 5	< 3
MW-3S	10-Nov-00	265770	< 10	< 1	< 1	16	< 10	< 10	< 5	6.1
MW-3S	25-May-01	279373	< 10	< 1	< 1	14	< 10	< 10	< 5	23
MW-3S	15-Nov-01	293490	< 10	< 1	< 1	17	< 10	< 10	< 5	< 3
MW-3S	24-May-02	306690	< 10	< 1	< 10	16	< 10	< 10	< 5	< 3
MW-3S	8-Nov-02	320322	< 10	< 1	< 10	13	< 10	< 10	< 5	20
MW-3S	14-May-03	331554	< 10	< 1	< 1	11	< 10	< 10	< 5	16
MW-3S	6-Nov-03	348866	< 10	< 1	< 10	< 10	< 10	< 10	< 5.0	20
MW-3S	18-May-04	361830	< 10	< 1	< 10	13	< 10	< 10	< 5.0	12
MW-3S DUP	18-May-04	361847	< 10	< 1	< 10	19	< 10	< 10	< 5.0	12

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/l)							
			TOLUENE	ICE	1,1-DCE	1,1,1-CCA	1,1-DCA	CHLORO-BENZENE	AS ¹	LEAD ¹
MW-4DR	8-Jul-94	A4149201	< 1	1	< 1	0.4 J	< 1	< 1	< 1	11 J
MW-4DR	5-Oct-94	940888-04	< 0.5 U	< 0.5 U	< 0.5 U	0.4 J	< 0.5 U	< 0.5 U	< 2 U	< 11 U
MW-4DR	12-Jan-95	950020-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 JU	5.5
MW-4DR	15-Apr-95	950210-24	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	16.7
MW-4DR	13-Jul-95	950488-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	12
MW-4DR	11-Jan-96	960004-18	< 0.5 U	< 0.5 U	< 0.5 U	2	< 0.5 U	< 0.5 U	< 2 U	9.6
MW-4DR	10-Jul-96	960535-11	< 0.5 U	< 0.5 U	< 0.5 U	1	< 0.5 U	< 0.5 U	4.8 B	8.4
MW-4DR	17-Jan-97	WW2648175	< 0.05	< 0.05	< 0.05	1.7	0.46 J	< 0.05	< 1.7	24.7
MW-4DR	12-Jul-97	WW2743058	< 0.5	< 0.5	< 0.5	2.4	0.55	< 0.5	< 2	33
MW-4DR	15-Jan-98	WW2859271	< 0.5	< 0.5	< 0.5	4	0.86	< 0.5	< 2	18.8
MW-4DR	11-Sep-98	85515-6	< 0.5	< 0.5	< 0.5	5.9	< 0.5	< 0.5	< 2	20
MW-4DR	17-Mar-99	F218844	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-4DR DUP	17-Mar-99	F218845	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-4DR	5-Oct-99	F214119	< 10	< 1	< 1	< 10	< 10	< 10	< 5	7
MW-4DR	11-May-01	280079	< 10	< 1	< 1	10	10	< 10	5.2	576 ¹
MW-4DR	16-Nov-01	293497	< 10	< 1	< 1	< 10	< 10	< 10	< 5	25
MW-4DR	29-May-02	306694	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-4DR	7-Nov-02	319784	< 10	< 1	< 1	< 10	< 10	< 10	< 5	20
MW-4DR	15-May-03	331858	< 10	< 1	< 1	20	< 10	< 10	< 5	52
MW-4DR	4-Nov-03	348873	< 10	< 1	< 1	19	< 10	< 10	< 5.0	27
MW-4DR DUP	4-Nov-03	348876	< 10	< 1	< 1	17	< 10	< 10	< 5.0	29
MW-4DR	21-May-04	361831	< 10	< 1	< 1	18	< 10	< 10	< 5.0	7
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MW-4SR	7-Jul-94	A4146901	< 1	2	< 1	15	< 1	< 1	< 3	333 J
MW-4SR	5-Oct-94	940888-06	< 0.5 U	7	< 0.5 U	18	< 0.5 U	< 0.5 U	< 2 U	< 11 U
MW-4SR	12-Jan-95	950020-01	< 0.5 U	12	< 0.5 U	24	< 0.5 U	< 0.5 U	< 2 JU	33.4
MW-4SR DUP	12-Jan-95	950020-03	< 0.5 U	17	< 0.5 U	36	< 0.5 U	< 0.5 U	< 2 JU	36.3
MW-4SR	15-Apr-95	950210-23	< 0.5 U	12	< 0.5 U	23	< 0.5 U	< 0.5 U	< 2 U	16.6
MW-4SR	13-Jul-95	950488-04	< 0.5 U	13	< 0.5 U	19	< 0.5 U	0.9	< 2 U	21.7
MW-4SR	11-Jan-96	960004-17	< 0.5 U	33	< 0.5 U	27	< 0.5 U	< 0.5 U	< 2 U	2.7 B
MW-4SR	10-Jul-96	960535-10	< 0.5 U	29	< 0.5 U	21	< 0.5 U	< 0.5 U	2.7 B	8.1
MW-4SR	16-Jan-97	WW2648218	< 0.05	35	< 0.05	21	0.16 J	< 0.05	< 1.7	11.3
MW-4SR	12-Jul-97	WW2743057	< 0.5	50	< 0.5	23	< 0.5	< 0.5	< 2	8.9
MW-4SR	15-Jan-98	WW2859270	< 0.5	41	< 0.5	17	< 0.5	< 0.5	< 2	14.2
MW-4SR	11-Sep-98	85515-5	< 0.5	56	< 0.5	18	< 0.5	< 0.5	< 2	8.6
MW-4SR	17-Mar-99	F218846	< 10	70	< 1	< 10	< 10	< 10	< 5	3.8
MW-4SR ¹	5-Oct-99	-	-	-	-	-	-	-	-	-
MW-4SR	10-May-01	280078	< 10	71	< 1	13	< 10	< 10	< 5	188 ¹
MW-4SR	16-Nov-01	293495	< 10	61	< 1	15	< 10	< 10	< 5	16
MW-4SR DUP	16-Nov-01	293496	< 10	58	< 1	14	< 10	< 10	< 5	17
MW-4SR	29-May-02	306695	< 10	67	< 1	< 10	< 10	< 10	< 5	< 3
MW-4SR DUP	29-May-02	306701	< 10	54	< 1	< 10	< 10	< 10	< 5	< 3
MW-4SR	7-Nov-02	319783	< 50	66	< 50	< 50	< 50	< 50	< 5	< 3
MW-4SR	15-May-03	331720	< 10	100	< 5	22	< 10	< 10	< 5	6.1
MW-4SR DUP	15-May-03	331721	< 10	100	< 5	22	< 10	< 10	< 5	5.8
MW-4SR	4-Nov-03	348867	< 10	67	< 2	14	< 10	< 10	< 5.0	3.6
MW-4SR	21-May-04	361832	< 10	60	< 5	12	< 10	< 10	< 5.0	3.2

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-5	6-Jul-94	A4347216	< 1	< 1	< 1	< 1	< 1	< 1	< 3 J	4
MW-5	4-Oct-94	940888-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	20
MW-5	12-Jan-95	950012-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 6 U
MW-5	14-Apr-95	950210-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	3.1
MW-5	11-Jul-95	950474-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	5.5
MW-5	10-Jan-96	960014-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4.2
MW-5	9-Jul-96	960530-03	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4.1 B	< 2 U
MW-5	16-Jan-97	WW2648204	0.06 J	< 0.05 J	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	5.2
MW-5	11-Jul-97	WW2743078	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	7.2
MW-5	15-Jan-98	WW2859274	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-5	11-Sep-98	85515-7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	8.4
MW-5	16-Mar-99	E218836	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-5	6-Oct-99	E234150	< 10	< 1	< 1	< 10	< 10	< 10	< 5	3.7
MW-5	14-Mar-00	E245043	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-5	13-Nov-01	293145	< 10	< 1	< 1	< 10	< 10	< 10	< 5	5.4
MW-5	8-Nov-02	320321	< 10	< 1	< 1	< 10	< 10	< 10	< 5	22
MW-5	14-May-03	331853	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.1
MW-5	19-May-04	361833	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3.0
MW-5 DUP	19-May-04	361848	< 10	< 1	< 1	< 10	< 10	< 10	< 5	3.4
MW-8R	11-Jul-94	A4355609	< 1	< 1	< 1	< 1	< 1	< 1	< 3	60
MW-8R	4-Oct-94	940888-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	37
MW-8R	12-Jan-95	950012-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	87
MW-8R	14-Apr-95	950210-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	44.4
MW-8R	12-Jul-96	950482-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	33.5
MW-8R	9-Jan-96	960004-10	< 0.5 U	< 0.5 U	< 0.5 U	5	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-8R	10-Jul-96	960530-16	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	5.1 B	14.3
MW-8R	16-Jan-97	WW2648211	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	34.5
MW-8R	11-Jul-97	WW2743079	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	36.1
MW-8R	15-Jan-98	WW2859275	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	50.4
MW-8R	11-Sep-98	85515-8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	78
MW-8R	18-Mar-99	E218848	< 10	< 1	< 1	< 10	< 10	< 10	< 5	18
MW-8R	6-Oct-99	E234154	< 10	< 1	< 1	< 10	< 10	< 10	< 5	12
MW-8R DUP	6-Oct-99	E234155	< 10	< 1	< 1	< 10	< 10	< 10	< 5	21
MW-8R	13-Mar-00	E245030	< 10	< 1	< 1	< 10	< 10	< 10	< 5	14
MW-8R	9-Nov-00	265771	< 10	< 1	< 1	< 10	< 10	< 10	< 5	17
MW-8R	22-May-01	279726	< 10	< 1	< 1	< 10	< 10	< 10	< 5	46
MW-8R	19-Nov-01	293499	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.2
MW-8R	28-May-02	306692	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-8R DUP	28-May-02	306702	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-8R	7-Nov-02	319785	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-8R	15-May-03	331856	< 10	< 1	< 1	< 10	< 10	< 10	< 5	8.0
MW-8R	4-Nov-03	348874	< 10	< 1	< 1	< 10	< 10	< 10	< 5.0	< 3
MW-8R	21-May-04	361834	< 10	< 1	< 1	< 10	< 10	< 10	< 5.0	4

TABLE J
SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/L)							
			TOU/PNP	TC	1,1-DCEP	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ¹	TPAD ¹
MW-9AR	11-Jul-94	A4135601	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2
MW-9AR	4-Oct-94	940888-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	1 B
MW-9AR	12-Jan-95	950012-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2 U
MW-9AR	14-Apr-95	950210-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-9AR	12-Jul-95	950402-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-9AR	10-Jan-96	960014-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-9AR	10-Jul-96	960530-17	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3 B	< 2 U
MW-9AR	16-Jan-97	WW2648207	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	1 J
MW-9AR	11-Jul-97	WW2743043	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-9AR	14-Jan-98	WW2859276	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-9AR	11-Sep-98	85515-9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 2
MW-9AR	16-Mar-99	F218834	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3 J
MW-9AR DUP	16-Mar-99	F218835	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	5-Oct-99	F214149	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	13-Mar-00	F245028	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR DUP	13-Mar-00	F245029	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	9-Nov-00	265784	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	14-Nov-01	293487	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	6-Nov-02	319786	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	14-May-03	331854	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-9AR	19-May-04	361835	< 10	< 1	< 1	< 10	< 10	< 10	< 5	6
MW-11	6-Jul-94	A4347217	< 0.04 J	< 1 J	1 J	110 J	0.7 J	< 1 J	< 3 J	23 J
MW-11	4-Oct-94	940888-10	< 0.5 U	< 0.5 U	1	120	1	< 0.5 U	< 2 U	59
MW-11 DUP	4-Oct-94	940888-12	< 0.5 U	< 0.5 U	2	130	2	< 0.5 U	< 2 U	65
MW-11	12-Jan-95	950012-06	< 0.5 U	< 0.5 U	2	160	2	< 0.5 U	< 2 U	21
MW-11	15-Apr-95	950210-19	< 0.5 U	< 0.5 U	1	120	< 0.5 U	< 0.5 U	< 2 U	52.3
MW-11	11-Jul-95	950474-06	< 0.5 U	< 0.5 U	1	110	2	< 0.5 U	< 2 U	18.9
MW-11	9-Jan-96	960004-11	< 0.5 U	< 0.5 U	1	98	1	< 0.5 U	< 2 U	21.8
MW-11	9-Jul-96	960530-06	< 0.5 U	< 0.5 U	1	160	< 0.5 U	< 0.5 U	4.8 B	54
MW-11	15-Jan-97	WW2648164	< 0.05	< 0.05	1.3	120	0.7	< 0.05	< 1.7	27
MW-11	11-Jul-97	WW2743044	< 0.5	< 0.5	1.7	110	0.91	< 0.5	< 2	41.4
MW-11	13-Jan-98	WW2859277	< 0.5	< 0.5	< 0.5	110	0.57	< 0.5	< 2	24.5
MW-11	11-Sep-98	85515-10	< 0.5	< 0.5	< 0.5	37	< 0.5	< 0.5	2.2	44
MW-11	17-Mar-99	F218837	< 20	< 2	< 2	110	< 20	< 20	< 5	< 3
MW-11	6-Oct-99	F234153	< 10	< 1	< 1	120	< 10	< 10	< 5	< 3
MW-11	14-Mar-00	F245039	< 20	< 2	< 2	110	< 20	< 20	< 5	7
MW-11 DUP	14-Mar-00	F245040	< 20	< 2	< 2	100	< 20	< 20	< 5	5.5
MW-11	10-Nov-00	265777	< 10	< 1	1.1	120	< 20	< 10	< 5	7.0
MW-11	22-May-01	279730	< 10	< 1	< 1	72	< 10	< 10	< 5	20.0
MW-11	13-Nov-01	293148	< 10	< 1	< 1	94	< 10	< 10	< 5	< 3
MW-11	5-Nov-02	319787	< 50	< 5	< 50	55	< 50	< 50	< 5	< 3
MW-11	13-May-03	331850	< 50	< 5	< 5	59	< 50	< 50	< 5	8.6
MW-11	18-May-04	361836	< 10	< 5	< 5	72	< 10	< 10	< 5	4.1

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-13	6-Oct-94	940888-25	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	22
MW-13	11-Jan-95	950012-16	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	34
MW-13	14-Apr-95	950210-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	11.6
MW-13	11-Jul-95	950474-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	15.4
MW-13	9-Jan-96	960004-03	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	20.1
MW-13	9-Jul-96	960530-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	20.4
MW-13	15-Jan-97	WW2648165	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	18.2
MW-13	13-Jan-98	WW2859278	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	18.9
MW-13	11-Sep-98	85515-11	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.7	39
MW-13	18-Mar-99	E218853	< 10	< 1	< 1	< 10	< 10	< 10	< 5	17
MW-13	5-Oct-99	E234132	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4
MW-13	13-Mar-00	E245032	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-13	9-Nov-00	265778	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.4
MW-102M	4-Oct-94	940888-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-102M	12-Jan-95	950020-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	7
MW-102M	16-Apr-95	950210-31	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4.9
MW-102M	13-Jul-95	950488-06	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 2 U	< 2 U
MW-102M	11-Jan-96	960014-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	2 B
MW-102M	10-Jul-96	960535-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4.9 B	67.8
MW-102M	24-Jan-97	WW2651853	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	2 J	3.9
MW-102M	15-Jan-98	WW2859279	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-102M	11-Sep-98	85515-12	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.2	3.9
MW-102M	18-Mar-99	E218850	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	5-Oct-99	E234137	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M DUP	5-Oct-99	E234138	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	31-May-01	280080	< 10	< 1	< 1	< 10	< 10	< 10	< 5	155 ³
MW-102M	16-Nov-01	293486	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	29-May-02	306696	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	7-Nov-02	319788	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M DUP	7-Nov-02	319796	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	15-May-03	331857	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	4-Nov-03	348868	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-102M	20-May-04	361837	< 10	< 1	< 1	< 10	< 10	< 10	< 5	11
MW-102M DUP	20-May-04	361849	< 10	< 1	< 1	< 10	< 10	< 10	< 5	9

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/L)							
			TOUENE	TCF	1,1-DCT	1,1,1-CCA	1,1-DCA	CHLORO-BENZENE	AN	LEAD
MW-103	11-Jul-94	A4155607	1 J	1	1	1	1	1	1	1
MW-103	6-Oct-94	940888-26	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4 B
MW-103	11-Jan-95	950012-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 5 U
MW-103	14-Apr-95	950210-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-103	11-Jul-95	950474-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-103	10-Jan-96	960014-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-103	10-Jul-96	960530-20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-103	15-Jan-97	WW2648169	0.25 J	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	1.7 J
MW-103 DUP	15-Jan-97	WW2648171	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	2 B J
MW-103	11-Jul-97	WW2743047	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-103	14-Jan-98	WW2859280	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	1 B
MW-103 DUP	14-Jan-98	WW2859302	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	1.6
MW-103	11-Sep-98	85515-13	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	4
MW-103 DUP	11-Sep-98	85515-29	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	1.6
MW-103	16-Mar-99	E218830	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-103	4-Oct-99	E214145	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	6-Jul-94	A4147213	< 1	0.2 J	< 1	< 1	< 1	< 1	< 1	5
MW-104	6-Oct-94	940888-27	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	2 B
MW-104	10-Jan-95	950012-08	0.7	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2.6 UB
MW-104	14-Apr-95	950210-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-104	11-Jul-95	950474-03	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3	< 2 U	< 2 U
MW-104	10-Jan-96	960014-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	2.1 B
MW-104 DUP	10-Jan-96	960014-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-104	9-Jul-96	960530-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	7.4 B	< 2 U
MW-104 DUP	9-Jul-96	960530-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4.2 B	< 2 U
MW-104	15-Jan-97	WW2648168	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	1.5 J
MW-104	11-Jul-97	WW2743048	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-104	14-Jan-98	WW2859281	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-104	11-Sep-98	85515-14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 2
MW-104	16-Mar-99	E218831	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	4-Oct-99	E214146	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	13-Mar-00	E245034	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	9-Nov-00	265785	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	14-Nov-01	293488	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	5-Nov-02	319789	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	13-May-03	331848	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-104	19-May-04	361838	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-105	7-Jul-94	A4346904	< 1	67 J	0.3 J	60 J	29 J	< 1	< 3	< 2 J
MW-105	4-Oct-94	940888-14	< 0.5 U	97	< 0.5 U	61	26	< 0.5 U	< 2 U	< 1 U
MW-105	11-Jan-95	950012-22	< 0.5 U	120	< 0.5 U	44	11	< 0.5 U	< 2 JU	6.7
MW-105	16-Apr-95	950210-30	< 0.5 U	110	1	38	9	< 0.5 U	< 2 U	< 2 U
MW-105	13-Jul-95	950488-02	< 0.5 U	69	< 0.5 U	22	9	< 0.5 U	< 2 U	< 2 U
MW-105 DUP	13-Jul-95	950488-03	< 0.5 UJ	51 J	< 0.5 UJ	18 J	7 J	< 0.5 UJ	< 2 U	< 2 U
MW-105	11-Jan-96	960004-20	< 1 U	200	< 1 U	62	11	< 1 U	< 2 U	< 1 U
MW-105	10-Jul-96	960535-07	< 0.5 U	430 J	< 0.5 U	33	12	< 0.5 U	5.4 B	< 2 U
MW-105	16-Jan-97	WW2648213	< 0.05	56	< 0.05	6.1	2	< 0.05	< 1.7	1 J
MW-105	12-Jul-97	WW2743049	< 0.5	370	< 0.5	31.0	7.5	< 0.5	< 2	< 2
MW-105	15-Jan-98	WW2859282	< 0.5	350	< 0.5	34	9.5	< 0.5	< 2	< 2
MW-105	11-Sep-98	85515-15	< 0.5	190	< 0.5	35	7.6	< 0.5	2.3	< 2
MW-105	17-Mar-99	E218841	< 100	630	< 10	< 100	< 100	< 100	< 5	< 3
MW-105	5-Oct-99	E234136	< 10	1100	< 10	< 10	< 10	< 10	< 5	< 3
MW-105	14-Mar-00	E245047	< 200	1200	< 20	< 200	< 200	< 200	< 5	< 3
MW-105	9-Nov-00	265772	< 25	1600	< 25	77	< 25	< 25	< 5	< 3
MW-105 DUP	9-Nov-00	265787	< 10	1500	< 1	28	< 10	< 10	< 5	< 3
MW-105	30-May-01	280076	< 100	550	< 10	< 100	< 100	< 100	< 5	< 3
MW-105 DUP	30-May-01	280077	< 100	490	< 10	< 100	< 100	< 100	< 5	< 3
MW-105	16-Nov-01	293485	< 50	400	< 5	< 50	< 50	< 50	< 5	< 3
MW-105	30-May-02	306700	< 250	980	< 25	< 250	< 250	< 250	< 5	< 3
MW-105	7-Nov-02	319790	< 250	510	< 25	< 250	< 250	< 250	< 5	< 3
MW-105	15-May-03	331719	< 25	800	< 25	35	< 10	< 25	< 5	< 3
MW-105	5-Nov-03	348862	< 25	880	< 25	< 25	< 25	< 25	< 5	< 3
MW-105 DUP	5-Nov-03	348877	< 25	890	< 25	< 25	< 25	< 25	< 5	< 3
MW-105	20-May-04	361839	< 10	1200	< 50	< 10	< 10	< 10	< 5	< 3
MW-106	24-May-02	306687	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106	15-Nov-02	320674	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106	14-May-03	331556	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106	6-Nov-03	348863	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106	21-May-04	361840	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-108	6-Jul-94	A4347212	< 1	< 1	< 1	< 1	< 1	< 1	< 3	6
MW-108	6-Oct-94	940888-28	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-108	11-Jan-95	950012-15	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-108	14-Apr-95	950210-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-108	11-Jul-95	950474-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-108	9-Jan-96	960004-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-108 DUP	9-Jan-96	960004-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-108	9-Jul-96	960530-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-108	15-Jan-97	WW26481666	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	1.1 J
MW-108	11-Jul-97	WW2743050	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-108	13-Jan-98	WW2859283	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.3	< 2
MW-108	11-Sep-98	85515-16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.1	< 2
MW-108	18-Mar-99	E218858	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-108	5-Oct-99	E234134	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-108	14-Mar-00	E245035	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-108	9-Nov-00	265779	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-108	22-May-01	279729	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/L)							
			TOUENE	TCB	1,1-DCE	1,1,1-CCA	1,1-DCA	CHLORO-BENZENE	AS ¹	LEAD ¹
MW-201	8-Jul-94	A4349204	< 1	< 1	< 1	NA	< 0.5	< 0.5	< 3	8 J
MW-201	4-Oct-94	940888-14	< 0.5 U	< 0.5	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	24 B
MW-201	11-Jan-95	950012-17	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 11 UB
MW-201	15-Apr-95	950210-20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-201	12-Jul-95	950482-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-201	9-Jan-96	960004-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-201	9-Jul-96	960530-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3.3 B	< 2 U
MW-201	15-Jan-97	WW2648162	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	18 J
MW-201	11-Jul-97	WW2743051	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-201	11-Jan-98	WW2859284	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-201	11-Sep-98	85515-17	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	14
MW-201	17-Mar-99	E218818	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-201	5-Oct-99	E214142	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-201	14-Mar-00	E245041	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-201	10-Nov-00	265780	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-202	11-Jul-94	A4355607	< 1	< 1	< 1	< 1	< 1	< 1	< 3	4
MW-202	6-Oct-94	940888-29	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4 J	< 1 U
MW-202	10-Jan-95	950012-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	89.7
MW-202	15-Apr-95	950210-17	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	7.7
MW-202	12-Jul-95	950482-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3 B	23 B
MW-202	10-Jan-96	960014-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	5.9
MW-202	10-Jul-96	960530-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3.1 B	< 2 U
MW-202	15-Jan-97	WW2648170	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	2.9 J
MW-202	11-Jul-97	WW2743052	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	6
MW-202	14-Jan-98	WW2859285	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	2.7
MW-202	11-Sep-98	85515-18	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.6	12
MW-202	18-Mar-99	E218857	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-202	5-Oct-99	E234141	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-202	14-Mar-00	E245036	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-202	9-Nov-00	265781	< 10	< 1	< 1	< 10	< 10	< 10	< 5	13

TABLE 3

SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-203	11-Jul-94	A4355602	1 J	< 1	< 1	< 1	< 1	< 1	< 3	14.1 J
MW-203	5-Oct-94	940888-16	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-203 DUP	5-Oct-94	940888-11	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	1.4 B
MW-203	10-Jan-95	950012-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	48
MW-203	15-Apr-95	950210-18	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	46
MW-203	12-Jul-95	950482-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	31.7
MW-203	10-Jan-96	960014-13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4.3
MW-203	10-Jul-96	960530-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3.7 B	< 2 U
MW-203	16-Jan-97	WW2648205	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	7.1
MW-203	11-Jul-97	WW2743080	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	4.9
MW-203	14-Jan-98	WW2859286	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	3.6
MW-203	11-Sep-98	85515-19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.4	4.8
MW-203	18-Mar-99	E218854	< 10	< 1	< 1	< 10	< 10	< 10	< 5	5.6
MW-203	5-Oct-99	E234140	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.4
MW-203	14-Mar-00	E245037	< 10	< 1	< 1	< 10	< 10	< 10	< 5	6.7
MW-203	10-Nov-00	265786	< 10	4.9	< 1	< 10	< 10	< 10	< 5	< 3
MW-203 DUP	10-Nov-00	265788	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-203	13-Nov-01	293146	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-203	5-Nov-02	319791	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-203	13-May-03	331851	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-203	18-May-04	361841	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-204	11-Jul-94	A4355601	< 1	< 1	< 1	< 1	< 1	< 1	< 3	13
MW-204	6-Oct-94	940888-30	0.3 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.4 J	2.8 J	< 1 U
MW-204	11-Jan-95	950012-14	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 9.2 U
MW-204	14-Apr-95	950210-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-204	12-Jul-95	950482-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-204	10-Jan-96	960014-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-204	9-Jul-96	960530-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-204	15-Jan-97	WW2648167	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	1.4 J
MW-204	11-Jul-97	WW2743081	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-204	13-Jan-98	WW2859287	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-204	11-Sep-98	85515-20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.8	< 2
MW-204	18-Mar-99	E218852	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-204	5-Oct-99	E234133	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-204	13-Mar-00	E245033	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-204	9-Nov-00	265782	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/l)							AS ¹	LEAD ¹
			TOLUENE	TCF	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZ/ENP			
MW-205	11-Jul-94	A4155605	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-205	6-Oct-94	940888-11	< 0.5 J	< 0.5 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.4 J	< 2 U	< 14 B	< 14 B
MW-205	11-Jan-95	950012-19	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5	< 2 U	< 147	< 147
MW-205	15-Apr-95	950210-16	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	< 2 U
MW-205	11-Jul-95	950474-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	< 2 U
MW-205	10-Jan-96	960014-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	< 2 U
MW-205	10-Jul-96	960530-15	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 43	< 43
MW-205 DUP	10-Jul-96	960530-14	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 58 B	< 2 U	< 2 U
MW-205	16-Jan-97	WW2648206	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 17	< 22 J	< 22 J
MW-205	11-Jul-97	WW2741082	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	< 2
MW-205	13-Jan-98	WW2859293	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	< 2
MW-205	11-Sep-98	85515-21	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 3	< 2	< 2
MW-205	18-Mar-99	E218855	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 58	< 58
MW-205 DUP	18-Mar-99	E218856	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 82 J	< 82 J
MW-205	5-Oct-99	E234135	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 47	< 47
MW-205	14-Mar-00	E245038	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-205	10-Nov-00	265783	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-205	22-May-01	279713	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 32	< 32
MW-205	13-Nov-01	293147	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-205	24-May-02	306691	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-205	5-Nov-02	319792	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-205	13-May-03	331849	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 39	< 39
MW-205	5-Nov-03	348869	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 42	< 42
MW-205	19-May-04	361842	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 8	< 8
MW-302S	6-Jul-94	A4347218	< 0.1 J	< 1	< 1	< 1	< 1	< 1	< 3 J	< 22 J	< 22 J
MW-302S	4-Oct-94	940888-18	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 B	< 2 B
MW-302S	10-Jan-95	950012-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U
MW-302S	14-Apr-95	950210-15	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	< 2 U
MW-302S	11-Jul-95	950474-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	< 2 U
MW-302S	9-Jan-96	960004-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U
MW-302S	9-Jul-96	960530-05	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 B	< 37	< 37
MW-302S	15-Jan-97	WW2648161	< 0.11 J	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 17	< 14 J	< 14 J
MW-302S	11-Jul-97	WW274083	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	< 2
MW-302S	13-Jan-98	WW2859294	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	< 2
MW-302S	11-Sep-98	85515-22	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 3.3	< 2	< 2
MW-302S	17-Mar-99	E218839	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3	< 3
MW-302S	5-Oct-99	-	-	-	-	-	-	-	-	-	-

TABLE 3

**SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE**

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)							
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ³	LEAD ³
MW-302D	6-Jul-94	A4347214	< 1	< 1	< 1	< 1	< 1	< 1	< 3	12
MW-302D	5-Oct-94	940888-17	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	8
MW-302D	11-Jan-95	950012-18	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	1.8 UB
MW-302D	14-Apr-95	950210-14	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	12
MW-302D	11-Jul-95	950474-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	6
MW-302D DUP	11-Jul-95	950474-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	6
MW-302D	9-Jan-96	960004-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	7
MW-302D	9-Jul-96	960530-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	11.6
MW-302D	15-Jan-97	WW2648163	< 0.05	< 0.05	< 0.05	< 0.04	< 0.04	< 0.05	< 1.7	5.4
MW-302D	11-Jul-97	WW2740384	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-302D	13-Jan-98	WW2859295	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	2.4
MW-302D	11-Sep-98	85515-23	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	6.5
MW-302D	17-Mar-99	E218840	< 10	< 1	< 1	< 10	< 10	< 10	< 5	7.8
MW-302D	5-Oct-99	E234143	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-302D	14-Mar-00	E245042	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.2
MW-302D	10-Nov-00	265773	< 10	< 1	< 1	< 10	< 10	< 10	< 5	4.1
MW-302D	22-May-01	279727	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-302D	9-Nov-01	293144	< 10	< 1	< 1	< 10	< 10	< 10	< 5	9.4
MW-302D	23-May-02	306697	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-302D	5-Nov-02	319793	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-302D	13-May-03	331852	< 10	< 1	< 1	< 10	< 10	< 10	< 5	9.7
MW-302D	6-Nov-03	348870	< 10	< 1	< 1	< 10	< 10	< 10	< 5	7.4
MW-302D	18-May-04	361843	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3.0
MW-304S	11-Jul-94	A4355604	< 1	< 1	< 1	0.1 J	< 1	< 1	< 3	5 J
MW-304S DUP	11-Jul-94	A4355604FD	< 1	< 1	< 1	0.1 J	< 1	< 1	NA	NA
MW-304S	4-Oct-94	940888-19	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	2.4 B	4.6
MW-304S	11-Jan-95	950012-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 4 U
MW-304S	14-Apr-95	950210-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-304S	12-Jul-95	950482-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	5
MW-304S	10-Jan-96	960014-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	4
MW-304S	10-Jul-96	960530-19	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	3.9 B	< 2 U
MW-304S	16-Jan-97	WW2648208	< 0.05	< 0.05	< 0.05	0.38 J	< 0.04	< 0.05	< 1.7	12.8
MW-304S	11-Jul-97	WW2743085	< 0.5	< 0.5	< 0.5	0.55	< 0.5	< 0.5	< 2	21.8
MW-304S	14-Jan-98	WW2859296	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-304S	11-Sep-98	85515-24	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.7	28
MW-304S	16-Mar-99	E218833	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	5-Oct-99	E234147	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S DUP	5-Oct-99	E234148	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	13-Mar-00	E245027	< 10 J	< 1 J	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	9-Nov-00	265774	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	23-May-01	279736	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	14-Nov-01	293489	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	24-May-02	306688	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	8-Nov-02	320325	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	15-May-03	331859	< 10	< 1	< 1	< 10	< 10	< 10	< 5	8.9
MW-304S	5-Nov-03	348871	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-304S	19-May-04	361844	< 10	< 1	< 1	< 10	< 10	< 10	< 5	3.1

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE

Well Number	Sample Date	Sample ID Number	Concentration (µg/L)							
			TOUENE	PCP	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE	AS ¹	LEAD ¹
MW-105S	6-Jul-94	A4147215	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2 J
MW-105S *	10-Oct-94	940888-20/18	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-105S	10-Jan-95	950012-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-105S	14-Apr-95	950210-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-105S DUP	14-Apr-95	950210-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-105S	12-Jul-95	950482-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-105S DUP	12-Jul-95	950482-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-105S	9-Jan-96	960004-06	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-105S	10-Jul-96	960510-18	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-105S	16-Jan-97	WW2648210	< 0.05	< 0.05	< 0.05	0.11 J	< 0.04	< 0.05	< 1.7	1.3 J
MW-105S	11-Jul-97	WW274086	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-105S	14-Jan-98	WW2859297	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-105S	11-Sep-98	85515-25	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 3	< 2
MW-105S	17-Mar-99	E218842	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	6-Oct-99	E234156	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	13-Mar-00	E245011	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	9-Nov-00	265775	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	22-May-01	279731	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	15-Nov-01	293493	< 10	< 1	< 1	< 10	< 10	< 10	< 5	5.7
MW-105S	24-May-02	306689	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	6-Nov-02	319794	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	14-May-03	331557	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	6-Nov-03	348865	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-105S	20-May-04	361845	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	4-Oct-94	940888-21	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	2.1 J	< 1 U
MW-106S	10-Jan-95	950012-02	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 8.5 U
MW-106S DUP	10-Jan-95	950012-03	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-106S	14-Apr-95	950210-07	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-106S	12-Jul-95	950482-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U
MW-106S	9-Jan-96	960004-08	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U
MW-106S	9-Jul-96	960510-04	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	2.1 B	< 2 U
MW-106S	16-Jan-97	WW2648209	< 0.05	< 0.05	< 0.05	0.23 J	< 0.04	< 0.05	< 1.7	1.3 J
MW-106S	11-Jul-97	WW2743087	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	3.4
MW-106S	14-Jan-98	WW2859298	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2
MW-106S	11-Sep-98	85515-26	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.6	< 2
MW-106S	16-Mar-99	E218832	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	4-Oct-99	E234144	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	14-Mar-00	E245044	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	10-Nov-00	265776	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	22-May-01	279728	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	9-Nov-01	293143	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	23-May-02	306698	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	8-Nov-02	320326	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	14-May-03	331855	< 10	< 1	< 1	< 10	< 10	< 10	9.2	19
MW-106S	5-Nov-03	348872	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3
MW-106S	20-May-04	361846	< 10	< 1	< 1	< 10	< 10	< 10	< 5	< 3

TABLE 3

**SUMMARY OF GROUNDWATER SAMPLING RESULTS
SPRINGFIELD TOWNSHIP SUPERFUND SITE**

Well Number	Sample Date	Sample I.D. Number	Concentration (µg/L)								AS ³	LEAD ³
			TOLUENE	TCE	1,1-DCE	1,1,1-TCA	1,1-DCA	CHLORO-BENZENE				
Nickson Well	7-Apr-95	950210-29	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 2 U	
Nickson Well	10-Jul-96	960535-12	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	4.2 B	< 2 U	
Nickson Well	12-Jul-97	WW2743090	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	
Nickson Well	11-Sep-98	85515-27	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.7	< 2	
Nickson Well	6-Oct-99	E234157	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 2	
Nickson Well	25-May-01	279739	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	16 ³	
Nickson Well	15-Nov-01	293491	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	
Nickson Well	28-May-02	306693	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	
Nickson Well	8-Nov-02	320328	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	
Nickson Well	15-May-03	331860	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	
Nickson Well	5-Nov-03	348875	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	
Nickson Well	19-May-04	361853	< 10	< 1	< 1	< 10	< 10	< 10	< 10	< 5	< 3	

Notes:

1 Well damaged or inaccessible due to soil remediation activities.

2 MW-3S and MW-3D were previously reported in EarthTech reports as "MW-3SR" and "MW-3DR", respectively.

3 In November 2000 and prior sampling events, the wells were purged and sampled with bailers, and the groundwater samples for metal analysis were filtered in the field. In May 2001, the wells were purged and sampled with bailers, and the groundwater samples for metal analysis were not filtered and submitted for total metal analysis. In November 2001, the wells were purged and sampled with low flow sampling techniques, and the groundwater samples for metal analysis were not filtered and submitted for total metal analysis. Note that the groundwater samples in May 2001 may contain solids and the data overestimate metal concentrations in groundwater due to the sampling method utilized. Low flow sampling techniques will be used in the future sampling events.

< Denotes the detection limit determined by the limitations of the procedure or QC considerations.

DUP Denotes duplicate sample.

J Indicates the compound was positively identified, but the concentration is below the Practical Quantitation Limit (PQL) and the value is an approximate concentration.

U Indicates that constituent was not detected.

B Indicates that constituent was also detected in blank sample.

NA Indicates that the sample was not analyzed for particular constituent.

* Inorganic analyses for this well were from a sample collected on 10/04/94; VOCs analyses were run on a sample collected on 10/10/94. The resampling of this well on 10/10/94 was prompted by the breakage of the original VOC sample following shipment to the laboratory.

Bold indicates detected concentration exceeds the remedial action standard.

4 indicates the spike percent recovery was outside the control limits.

Abbreviations:

TCE - Trichloroethene

1,1-DCE - 1,1-Dichloroethene

1,1,1-TCA - 1,1,1-Trichloroethane

1,1-DCA - 1,1-Dichloroethane

AS - Arsenic

Attachment 4

Federal ARARs

The major ARARs that will be addressed and met by the selected remedy and whether the ARARs are listed as follows:

Executive Order 11988 and 11990; 40 CFR 6, Subpart A which requires that remedial actions must avoid adverse affects to floodplain or wetlands and evaluate potential impacts to these areas.

The Clean Air Act and 40 CFR 50 and 52 which require that) select types and quantities of air emissions be in compliance with regional air pollution control programs; approved State Implementation Plans and other appropriate federal air criteria.

40 CFR 141 which requires that ground water used as drinking water meet maximum contaminant levels (MCLs) for pollutants of concern.

40 CFR 144 and 146 well plugging and abandonment and other requirements for the injection of treated ground water under the Underground Injection Control Program.

40 CFR 268 Land Disposal Restrictions for the handling, treatment, and placement of hazardous wastes.

49 CFR 107 requirements for transporting hazardous materials off-site.

40 CFR 761 TSCA regulations for the treatment, storage, and handling of PCBs.

Attachment 5

State ARARs

Act 60 of 1976 (PCB Compounds) which prohibits the disposal of waste containing a concentration equal or greater than 100 ppm of PCBs.

Act 64 of 1979 (The Hazardous Waste Management Act) which regulates the treatment, transport and disposal of hazardous wastes from site restoration.

Act 98 of 1913 (The Waterworks and Sewerage Systems Act) which are rules for construction and operation of sewerage systems, as applicable for discharge of ground water via new sewer connection and certification of the operator.

Act 127 of 1970 (The Michigan Environmental Protection Act) which prohibits any action which pollutes, impairs, or destroys the State's natural resources, due to any remedial action at the site.

Act 203 of 1979 (The Goemare-Anderson Wetland Protection Act) which regulates discharges to wetlands.

Act 307 of 1990 (The Michigan Environmental Response Act) which provides for response activity to eliminate environmental contamination as sites containing hazardous substances and establishes cleanup standards.

Act 315 of 1969 (The Mineral Well Act) which establishes requirements for monitoring wells at the site.

Act 347 of 1972 (The Soil Erosion and Sedimentation control Act) which requires a soil erosion control measures at the site consistent with locally approved soil sedimentation and erosion control plans or rules.

Act 348 of 1965 (The Air Pollution Act) which requires air emissions to have 'non-injurious effects.'

Act 641 of 1978 (The Solid Waste Management Act) which establishes provisions governing the regulation and management of solid waste.

Public Health Code Act 368 which establishes the procedures for well abandonment.